

Claims

- [c1] A remote vehicle signal indicator system for a vehicle comprising: a transmitter coupled to a vehicle indication signal drive line of the vehicle, the transmitter configured to wirelessly transmit a receiver activation signal corresponding to a vehicle indication signal of the vehicle indication signal drive line wherein the vehicle indication signal is selected from the group consisting of a turn signal, a brake signal, a reverse gear signal, and a hazard signal; and a remote vehicle signal indicator coupled to a surface outside of the vehicle, the remote vehicle signal indicator including a signal indicator display, the remote vehicle signal indicator configured to receive the receiver activation signal from the transmitter and, in response, activate the signal indicator display.
- [c2] The remote vehicle signal indicator system of claim 1 wherein the transmitter is configured to receive operating power from the vehicle indication signal of the vehicle indication signal drive line.
- [c3] The remote vehicle signal indicator system of claim 1 further comprising a power supply for powering the remote vehicle signal indicator wherein the power supply is

electrically isolated from any power source within the vehicle.

- [c4] The remote vehicle signal indicator system of claim 3 wherein the power supply comprises a solar panel, wherein the solar panel provides energy to power the remote vehicle signal indicator.
- [c5] The remote vehicle signal indicator system of claim 3 further comprising a housing containing the remote vehicle signal indicator and the power supply.
- [c6] The remote vehicle signal indicator system of claim 1 wherein the transmitter comprises an encoder for encoding the receiver activation signal such that the receiver activation signal may be decoded only by the remote vehicle signal indicator.
- [c7] The remote vehicle signal indicator system of claim 1 wherein the surface outside of the vehicle comprises a surface of a structure being towed by the vehicle.
- [c8] The remote vehicle signal indicator system of claim 1 wherein the surface outside of the vehicle comprises a side view mirror of the vehicle and the signal indicator display comprises a turn signal indicator display.
- [c9] A remote vehicle signal indicator of a remote vehicle sig-

nal indicator system for a vehicle comprising: a housing coupled to a surface outside of the vehicle; a receiver within the housing, the receiver configured to wirelessly receive receiver activation signals from a transmitter coupled to the vehicle, the receiver activation signals corresponding to vehicle indication signals generated by the vehicle wherein the vehicle indication signals are selected from the group consisting of a turn signal, a brake signal, reverse gear signal and a hazard signal; and a signal indicator display coupled to the receiver and configured to display, in response to a received receiver activation signal, a remote vehicle indication signal corresponding to the vehicle indication signals generated by the vehicle.

- [c10] The remote vehicle signal indicator of claim 9 further comprising a power supply for providing power to the receiver and the signal indicator display.
- [c11] The remote vehicle signal indicator of claim 10 wherein the power supply comprises a solar panel, wherein the solar panel provides energy to operate the receiver, and the signal indicator display.
- [c12] The remote vehicle signal indicator of claim 10 wherein the power supply is contained in the housing.

- [c13] The remote vehicle signal indicator of claim 9 wherein the surface outside of the vehicle is a surface of a side view mirror and the signal indicator display comprises a turn signal indicator display.
- [c14] The remote vehicle signal indicator of claim 9 wherein the receiver is a radio frequency receiver.
- [c15] A transmitting device of a remote vehicle signal indicator system for a vehicle comprising: a housing attached to the vehicle; a signal monitoring line coupled to a vehicle indication signal drive line of the vehicle, the signal monitoring line configured to receive vehicle indication signals from the vehicle indication signal drive line wherein the vehicle indication signals are selected from the group consisting of a turn signal, a brake signal, reverse gear signal and a hazard signal; a transmitter within the housing and coupled to the signal monitoring line, the transmitter configured to wirelessly transmit a receiver activation signal corresponding to the vehicle indication signals of the vehicle indication signal drive line to a remote vehicle signal indicator located outside of the vehicle, in order to provide additional signal displays to those coupled to the vehicle indication signal drive line.
- [c16] The transmitting device of claim 15 wherein the trans-

mitter receives operating power from the signal monitoring line.

- [c17] The transmitting device of claim 15 wherein the transmitter is a radio frequency transmitter.
- [c18] The transmitting device of claim 15 wherein the transmitter comprises an encoder for encoding the receiver activation signal so that only particular receivers can decode the receiver activation signal.
- [c19] A method of providing additional vehicle signal indicators for a vehicle comprising: wirelessly receiving a receiver activation signal at a remote vehicle signal indicator coupled to a surface outside of the vehicle wherein the receiver activation signal is transmitted from the vehicle, the receiver activation signal corresponding to a vehicle indication signal generated within the vehicle wherein the vehicle indication signal is selected from the group consisting of a turn signal, a brake signal, a reverse gear signal, and a hazard signal; and displaying, in response to the wirelessly receiving, a remote vehicle indication signal corresponding to the vehicle indication signal generated within the vehicle, in order to provide additional signal displays to those provided within the vehicle.

- [c20] The method of claim 19 further comprising: detecting the vehicle indication signal generated within the vehicle; and transmitting from a transmitter, in response to the detecting, the receiver activation signal corresponding to the vehicle indication signal generated within the vehicle to the remote vehicle signal indicator.
- [c21] The method of claim 20 further comprising: powering the remote vehicle signal indicator with a power supply electrically isolated from the vehicle.
- [c22] The method of claim 21 wherein the powering step comprises powering the remote vehicle signal indicator from solar energy received at the solar panel.
- [c23] The method of claim 20 wherein the step of transmitting includes encoding the receiver activation signal so that unintended remote vehicle signal indicators can not decode the receiver activation signal.
- [c24] The method of claim 20 further comprising: deriving operating power for the transmitter from the vehicle indication signal.